



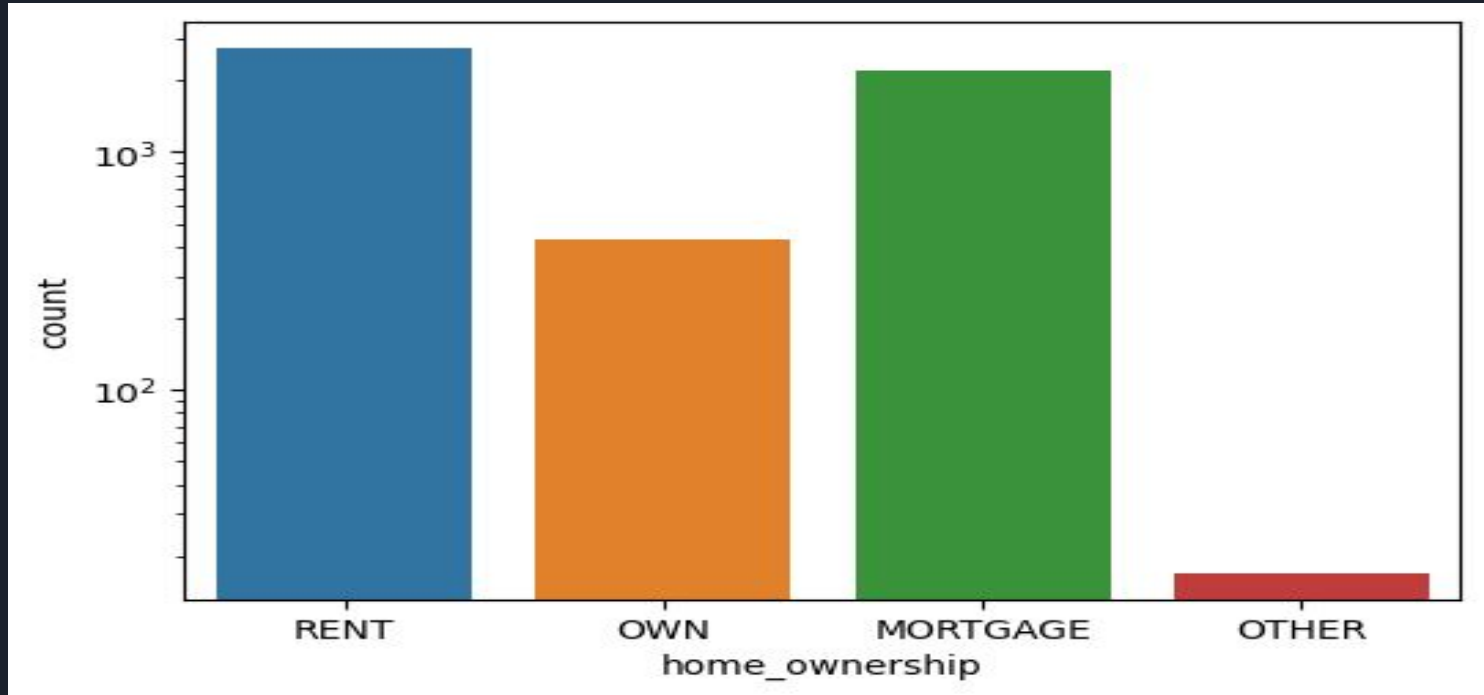
Lending Club Case Study

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MLC50

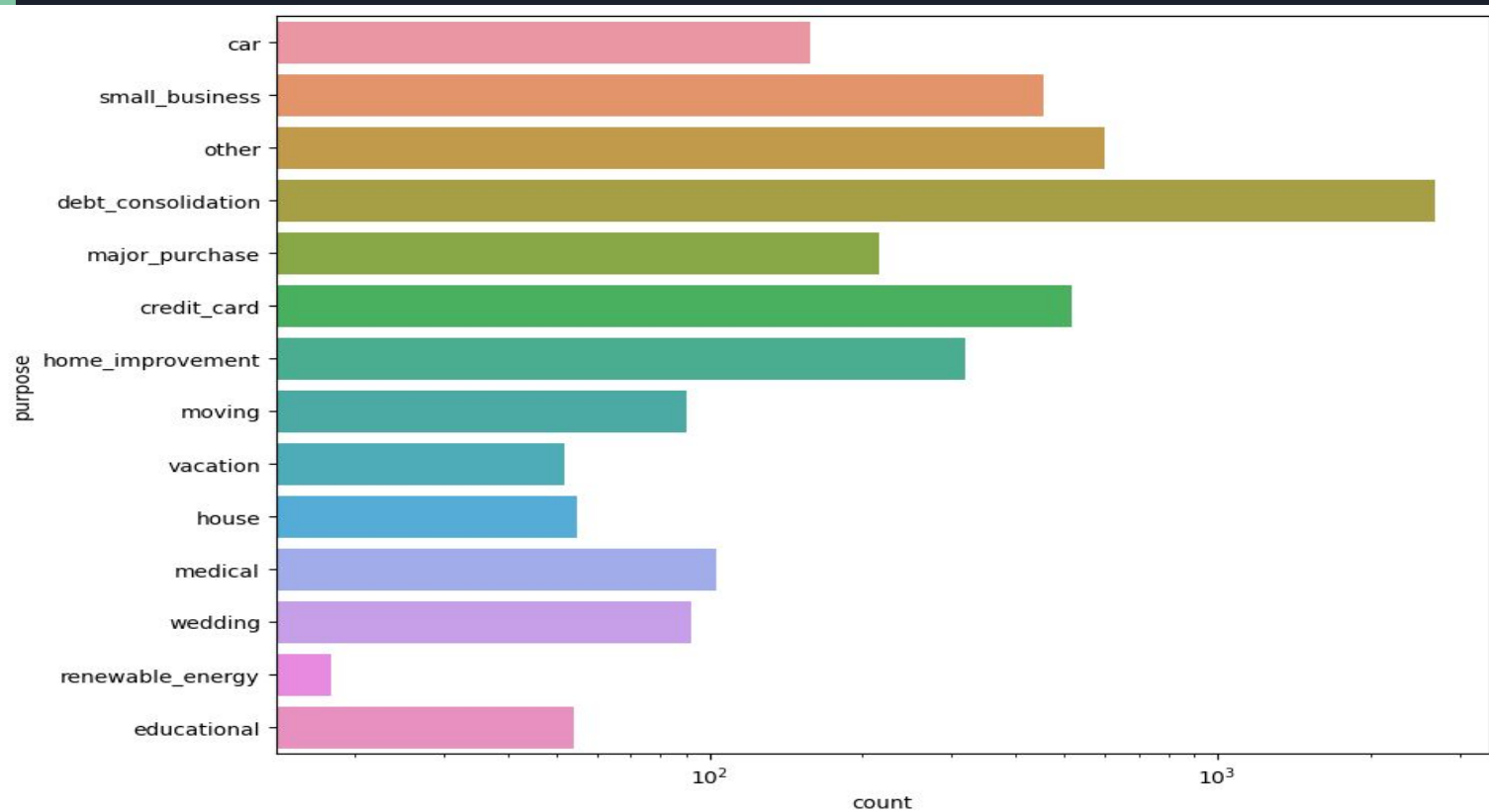


Observations on likelihood of defaulters from the given data.

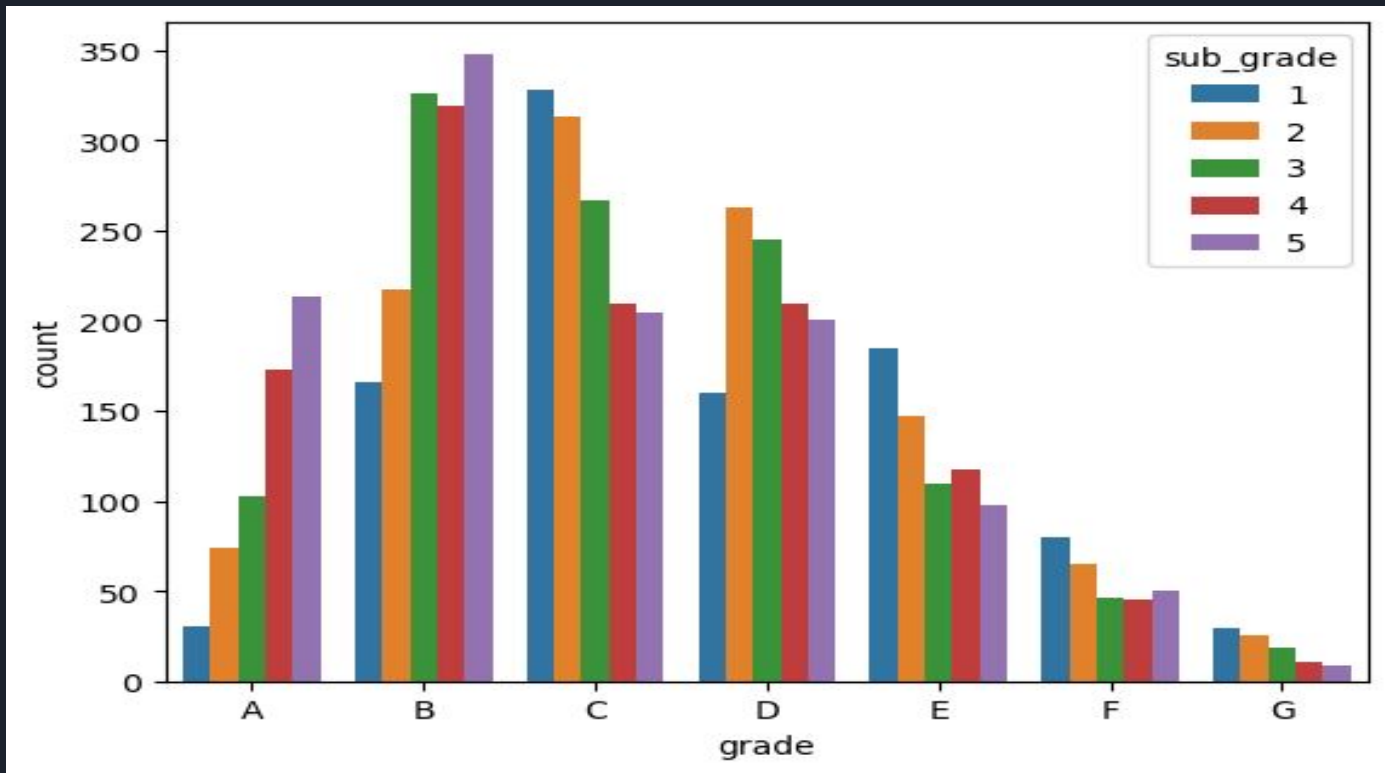
Home Ownership type 'RENT' are more likely to default.



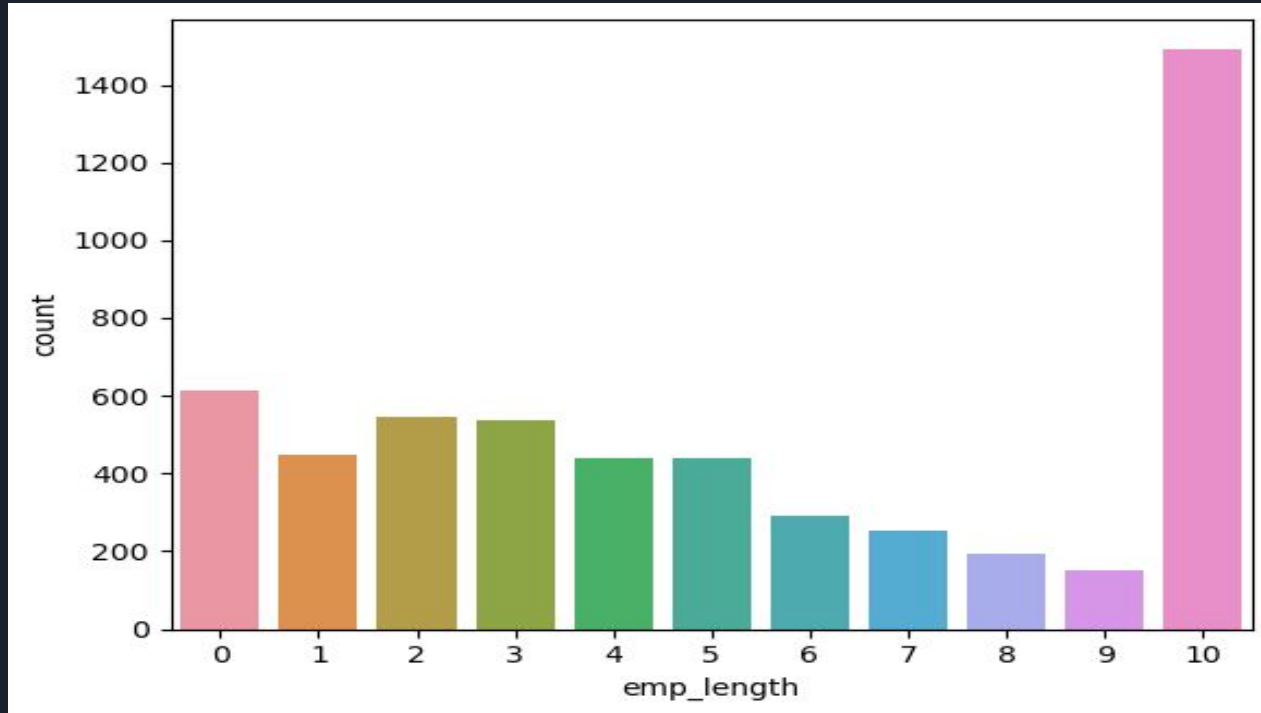
Purpose with 'debt_consolidation' are more likely to default.



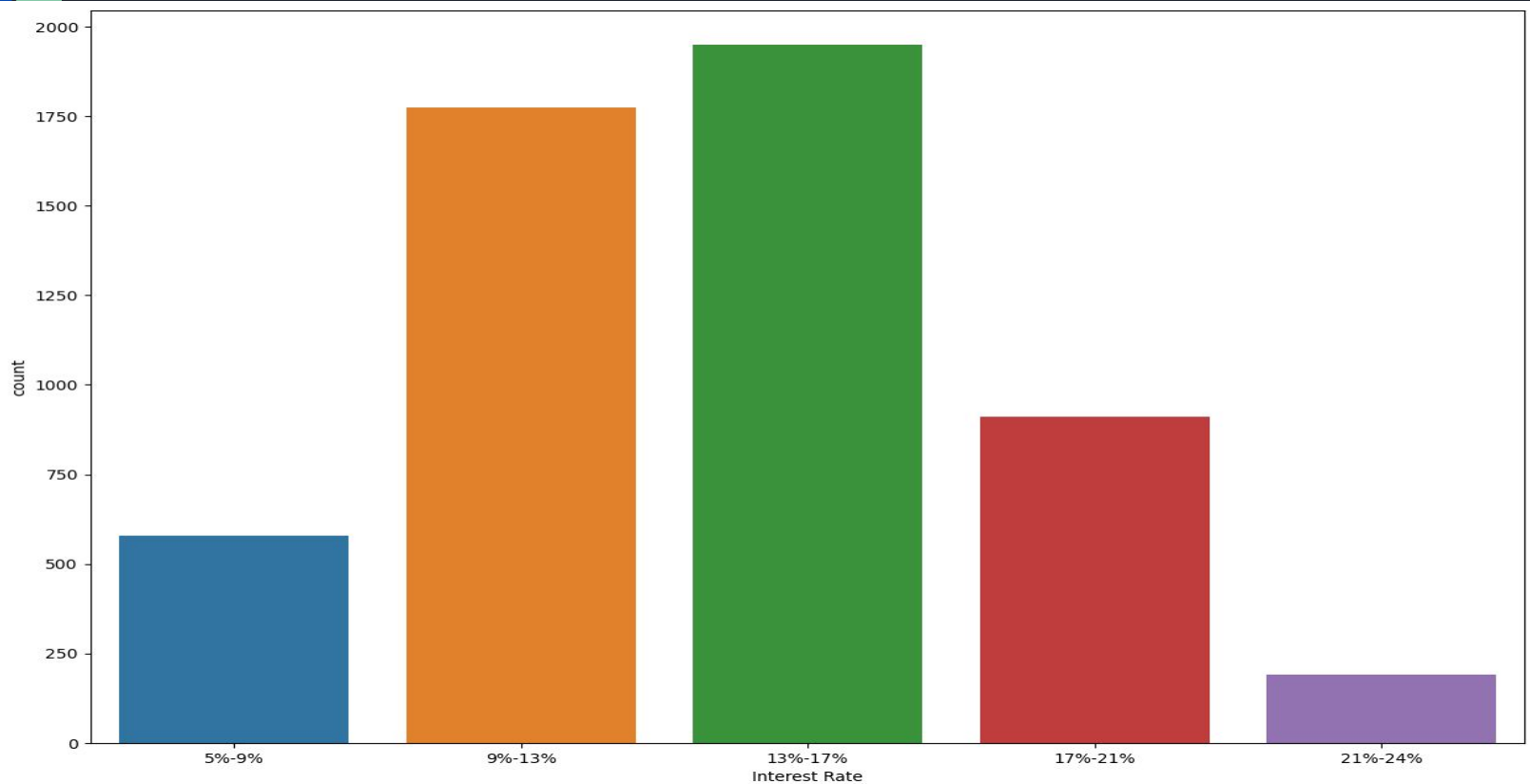
Grade category 'B' and sub_grade category B5 are more likely to default.



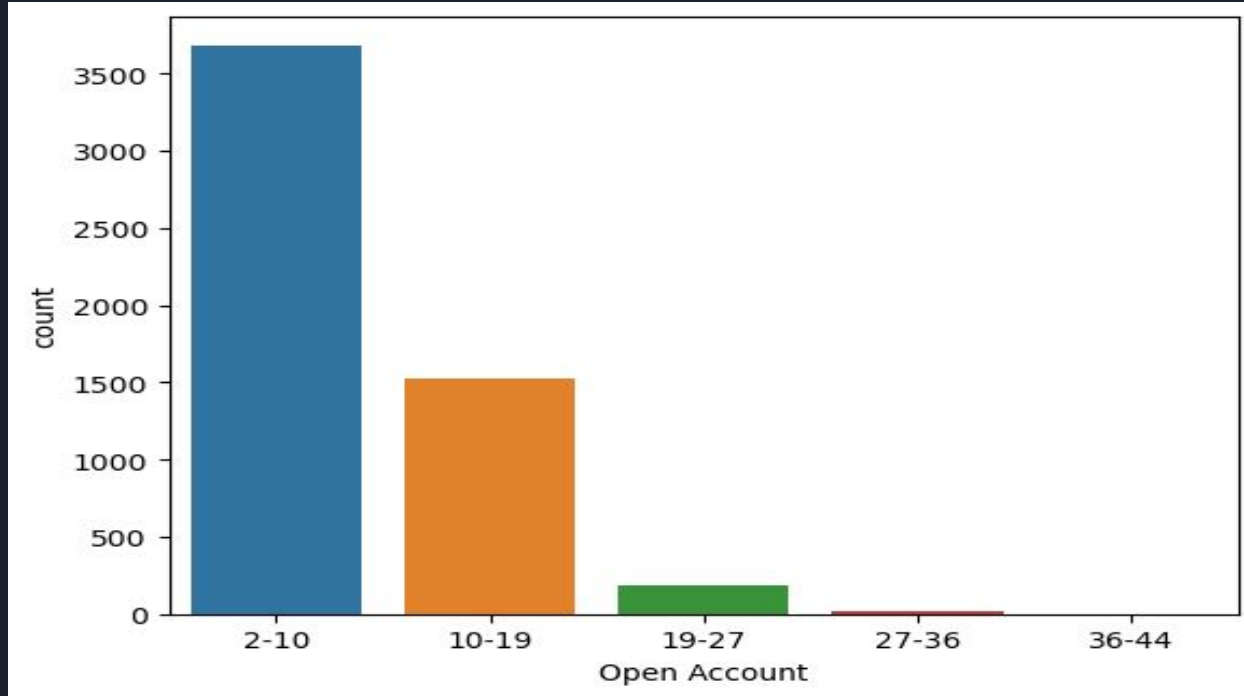
Employment length of 10+ years are more likely to default.



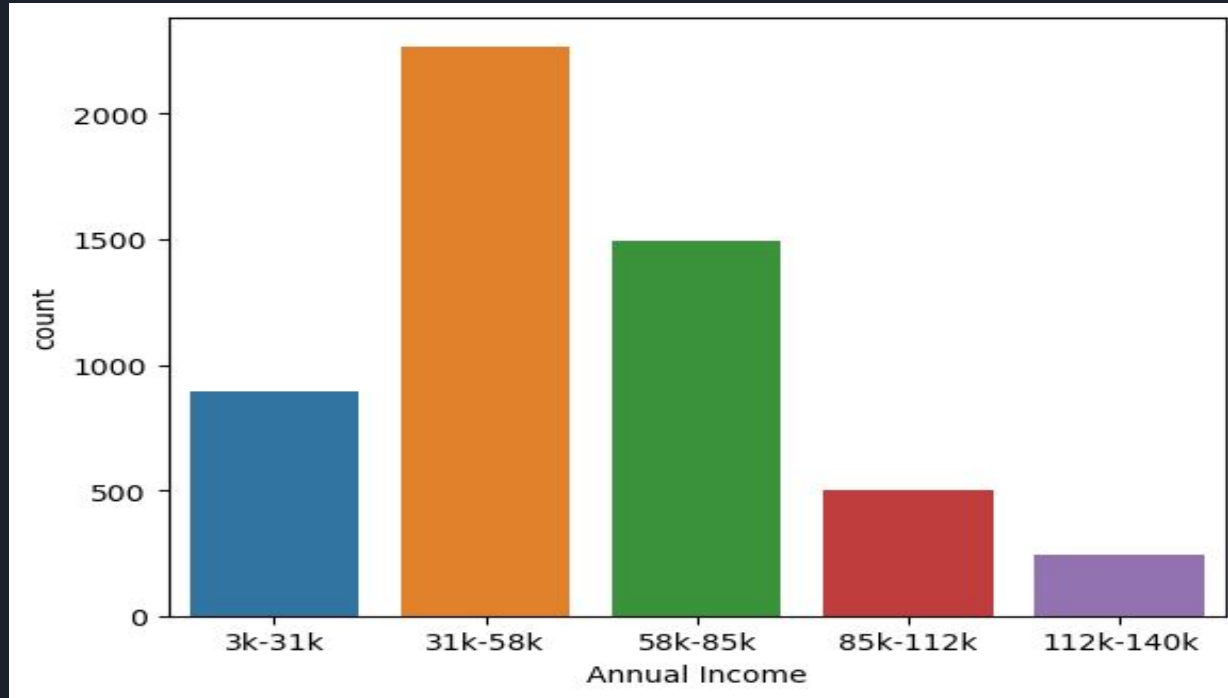
Interest rate in range 13-17% are more likely to default.



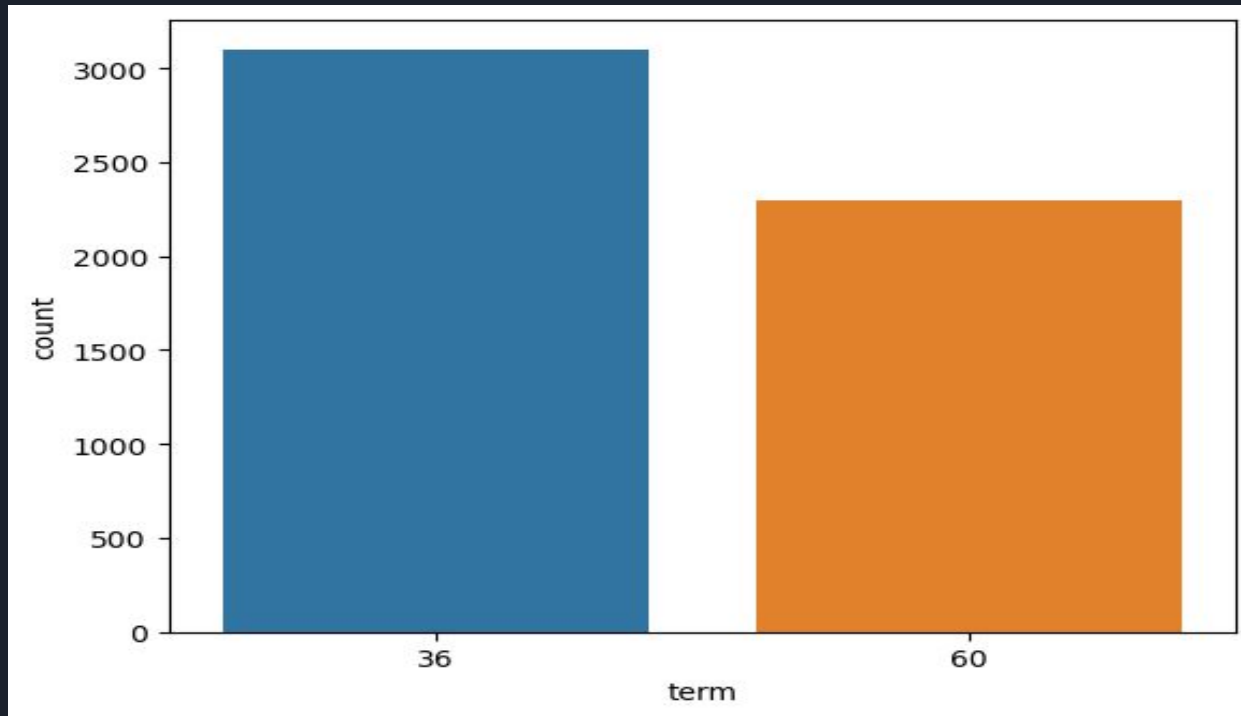
Applicants who have less open accounts are more likely to default.



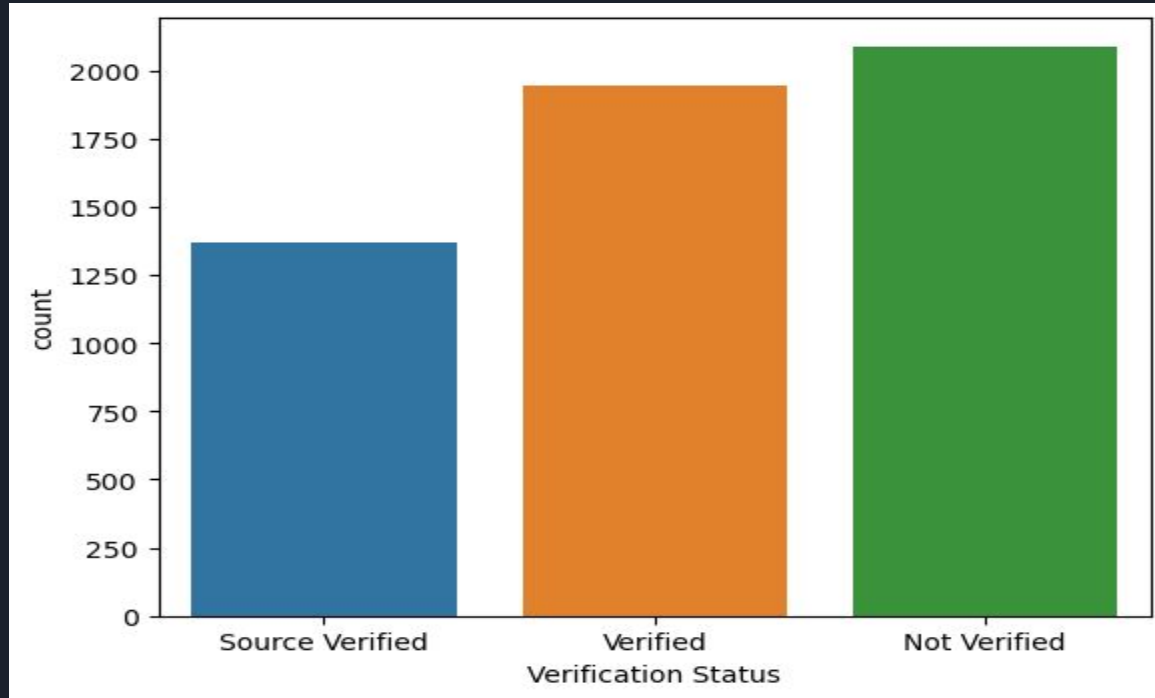
Applicants in annual income range 31k to 58k are more likely to default.



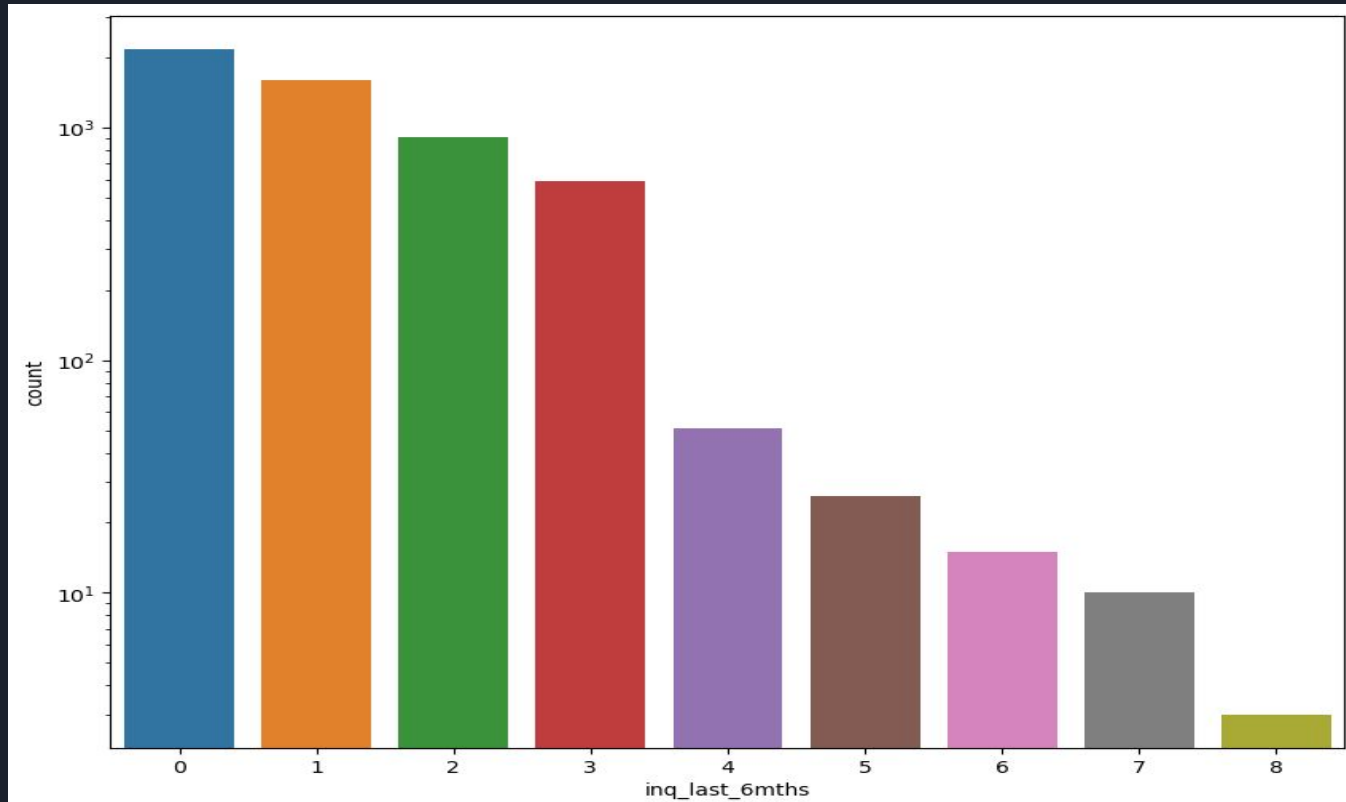
Applicants whose loan term is 36 months are more likely to default.




Applicants whose verification status is 'Not Verified' are more likely to default.

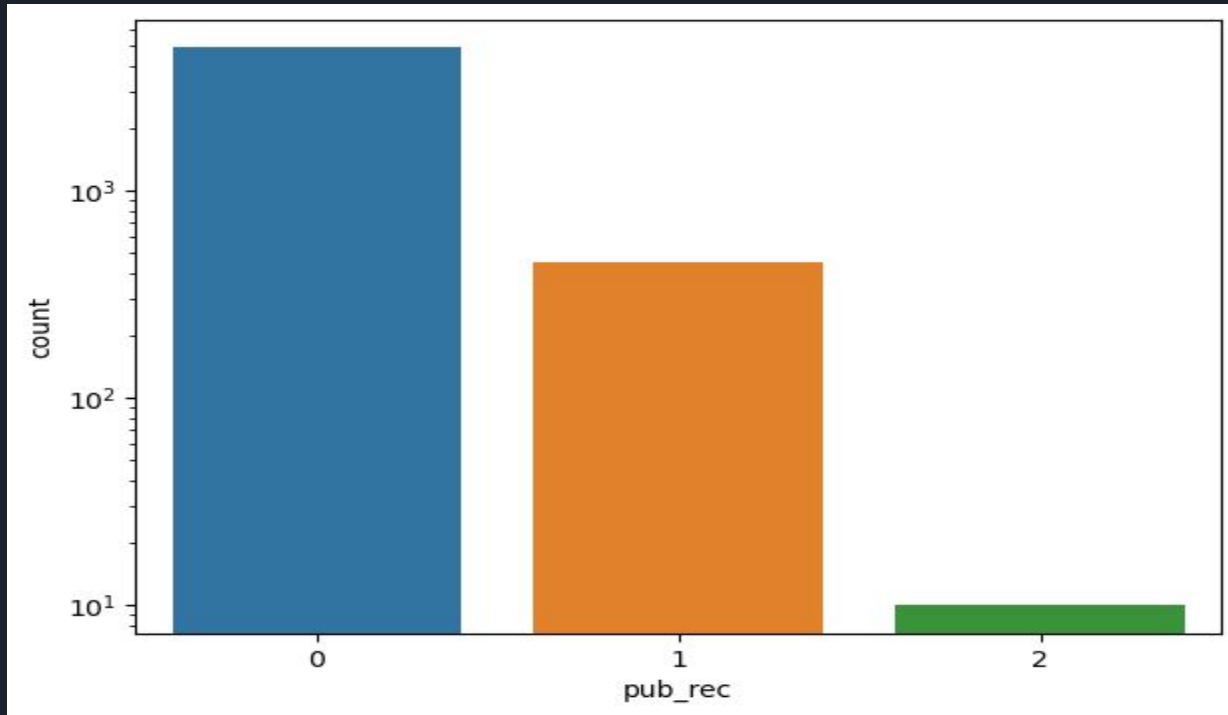


Applicants who inquired 0 times in last 6 months are more likely to default.

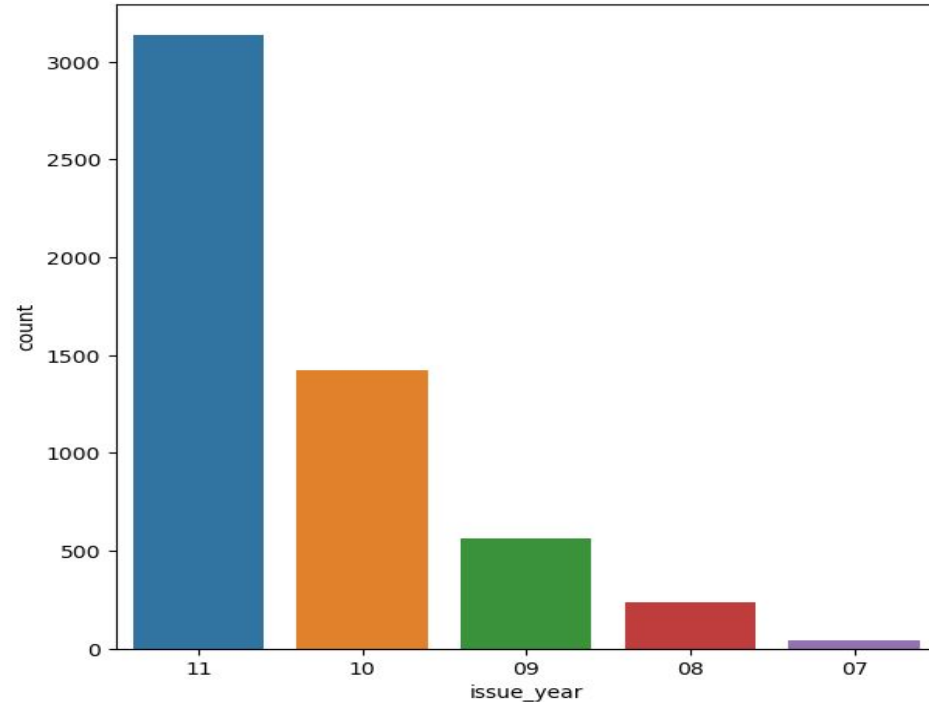
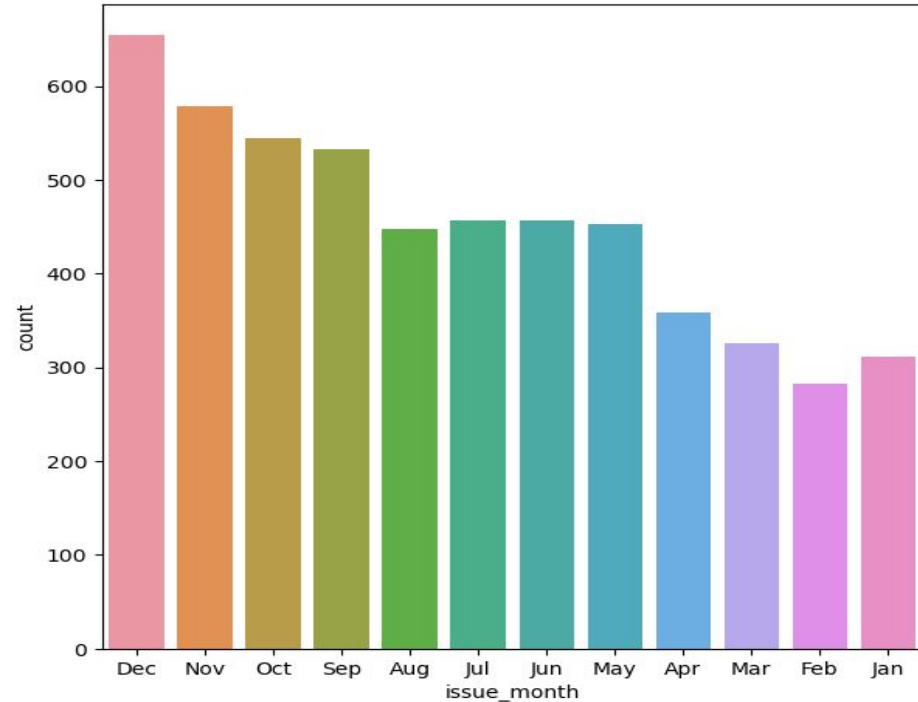




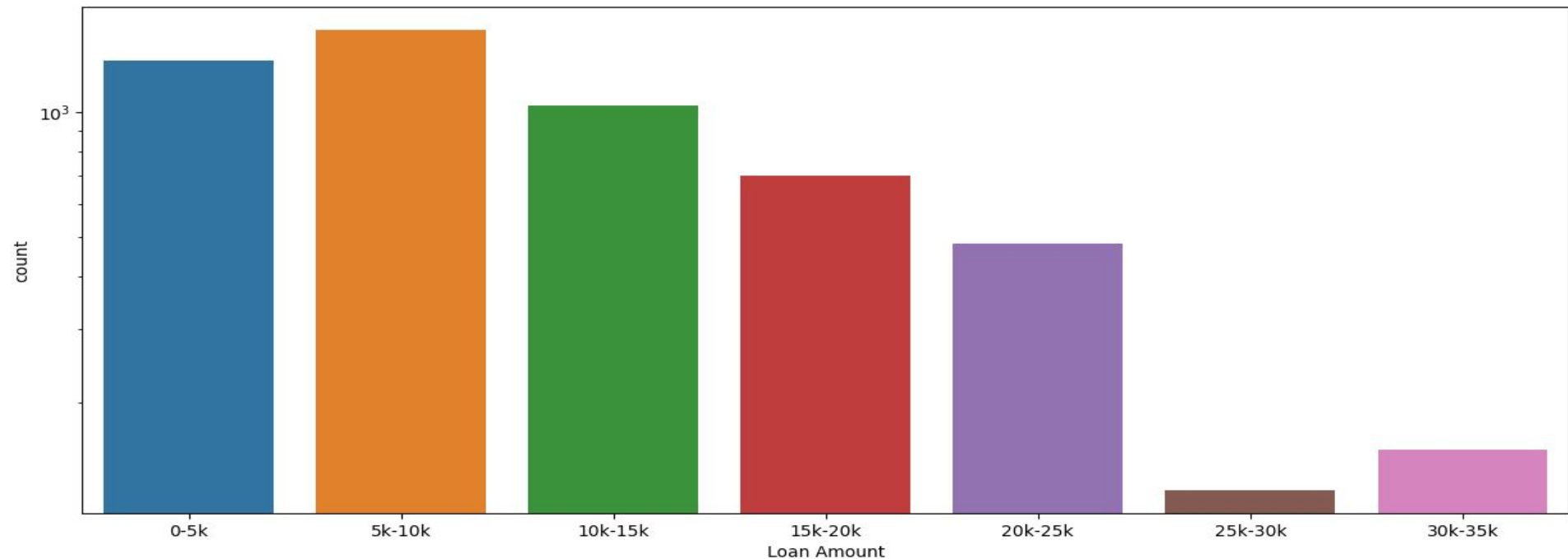
Applicants whose pub_record is 0 are more likely to default.




Applicants who were issued loans in year 2011 and in month December are more likely to default.

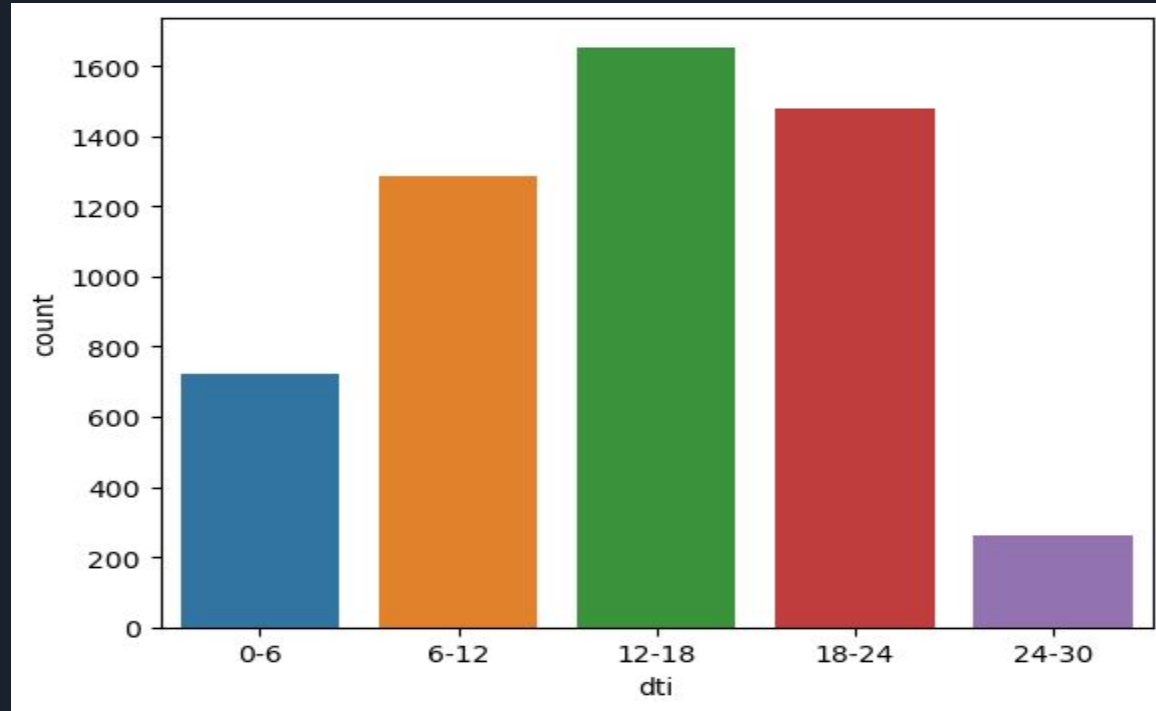


Applicants whose loan amount is in range 5k to 10k are more likely to default.

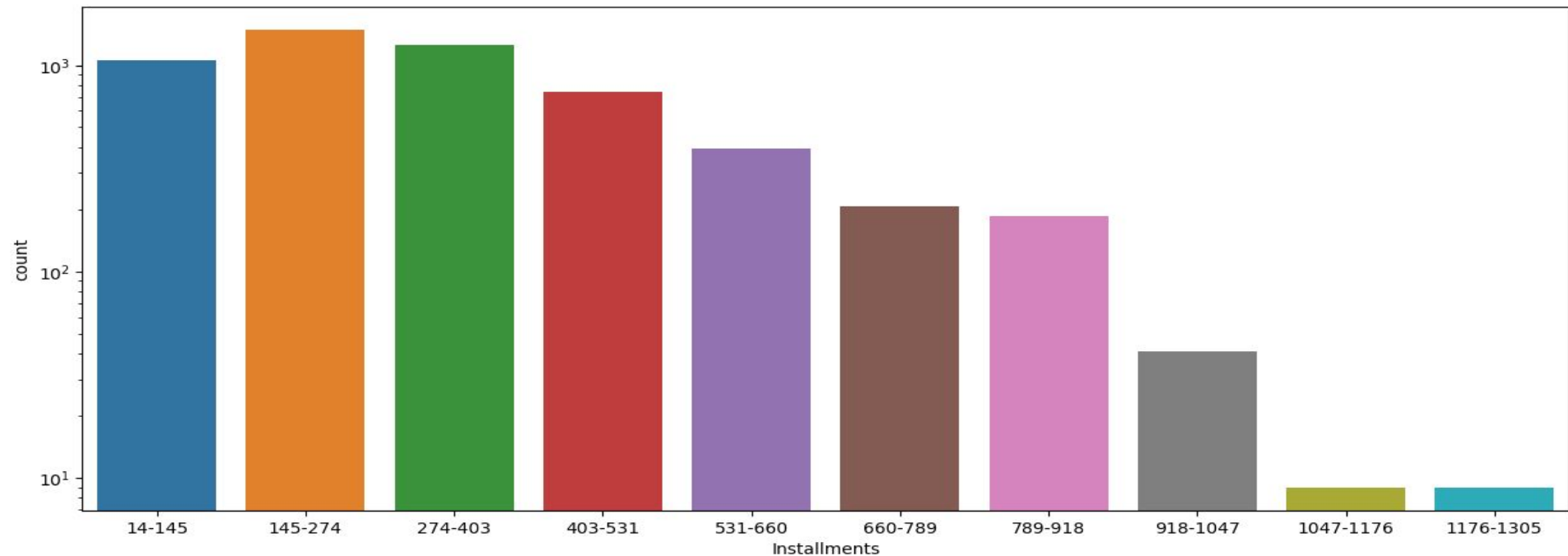




Applicants whose dti ratio is in range 12-18 are more likely to default.



Applicants whose installments are in range 145-274 are more likely to default.

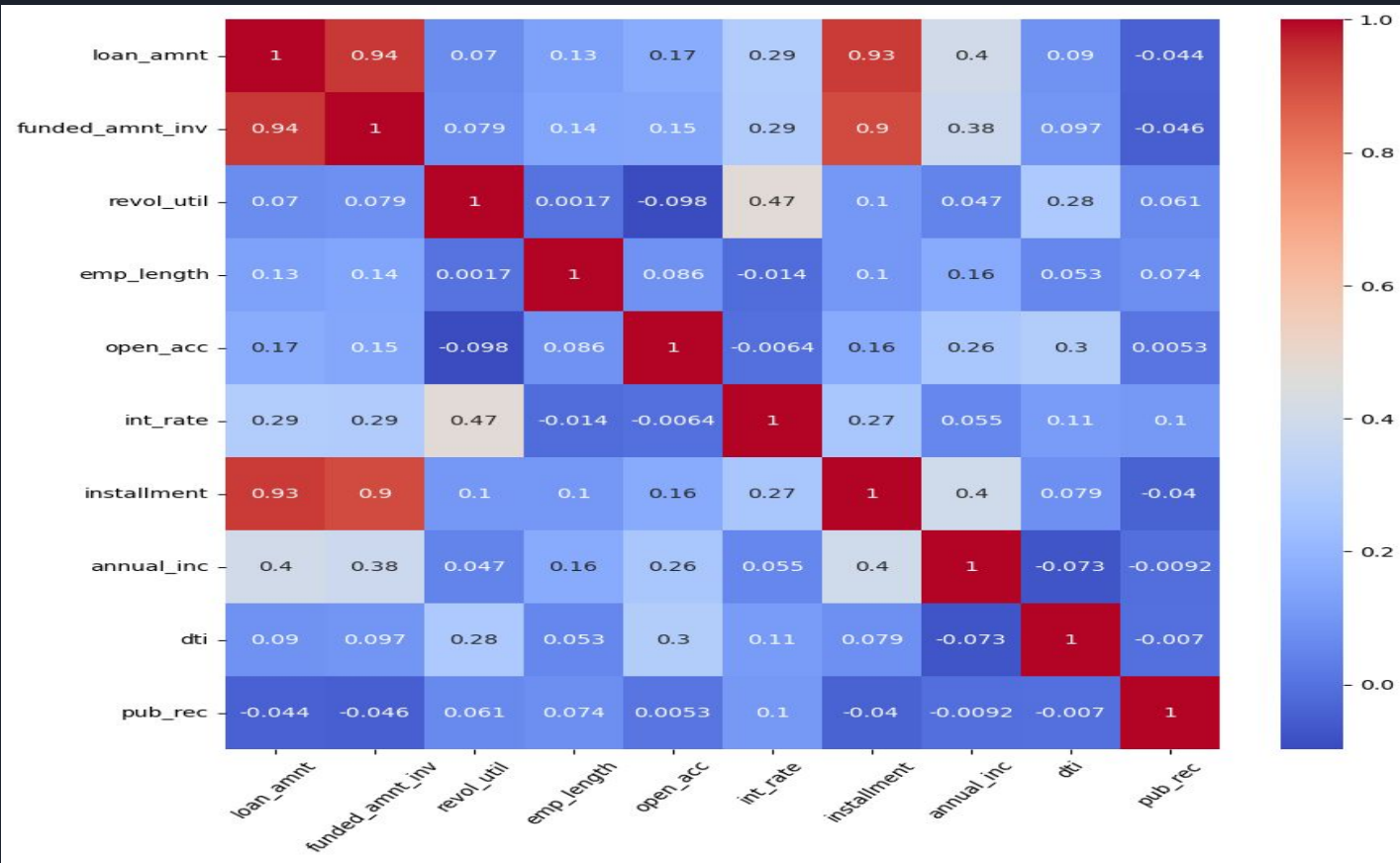




High correlation among these variables.

1. loan_amnt and funded_amnt_inv.
2. installment and loan_amnt.
3. funded_amnt and installment.

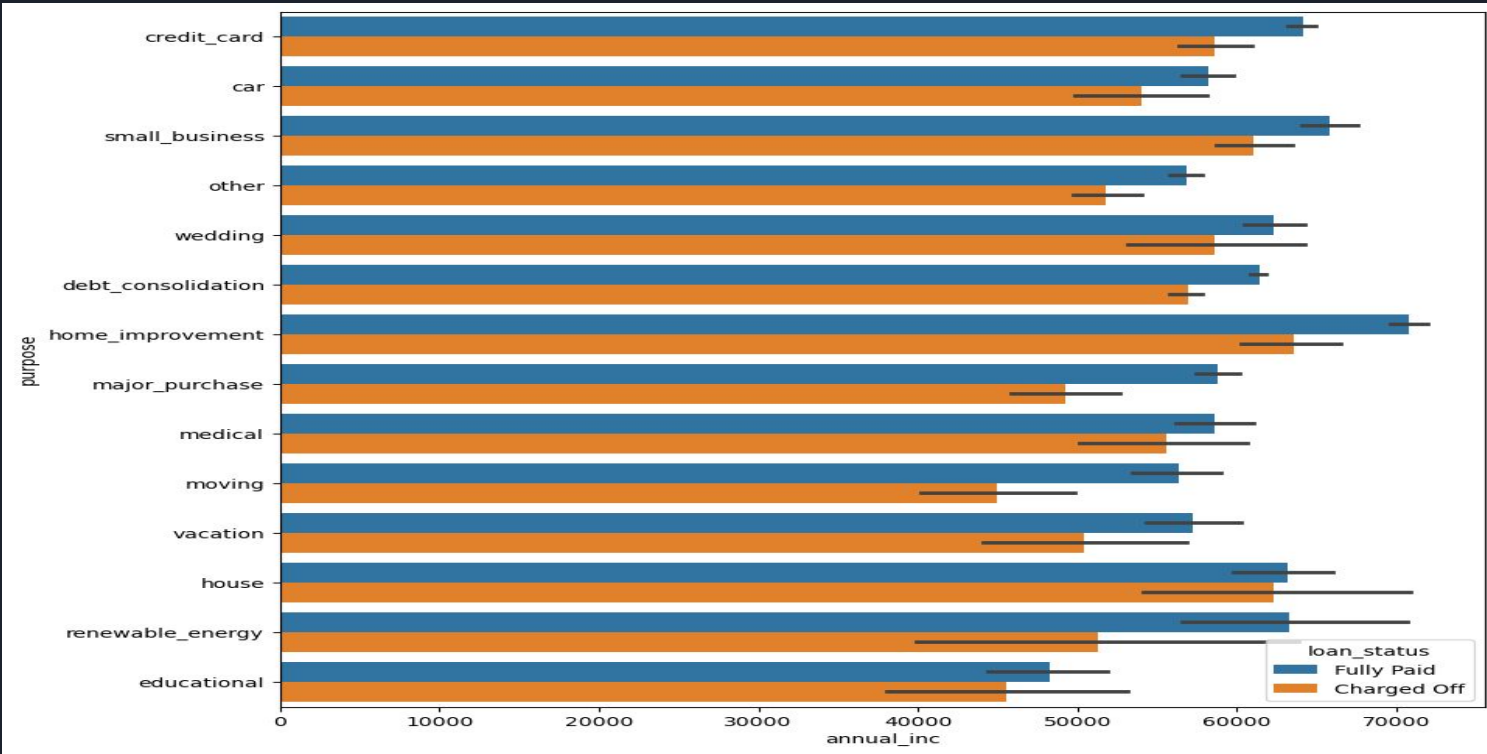
Correlation matrix.



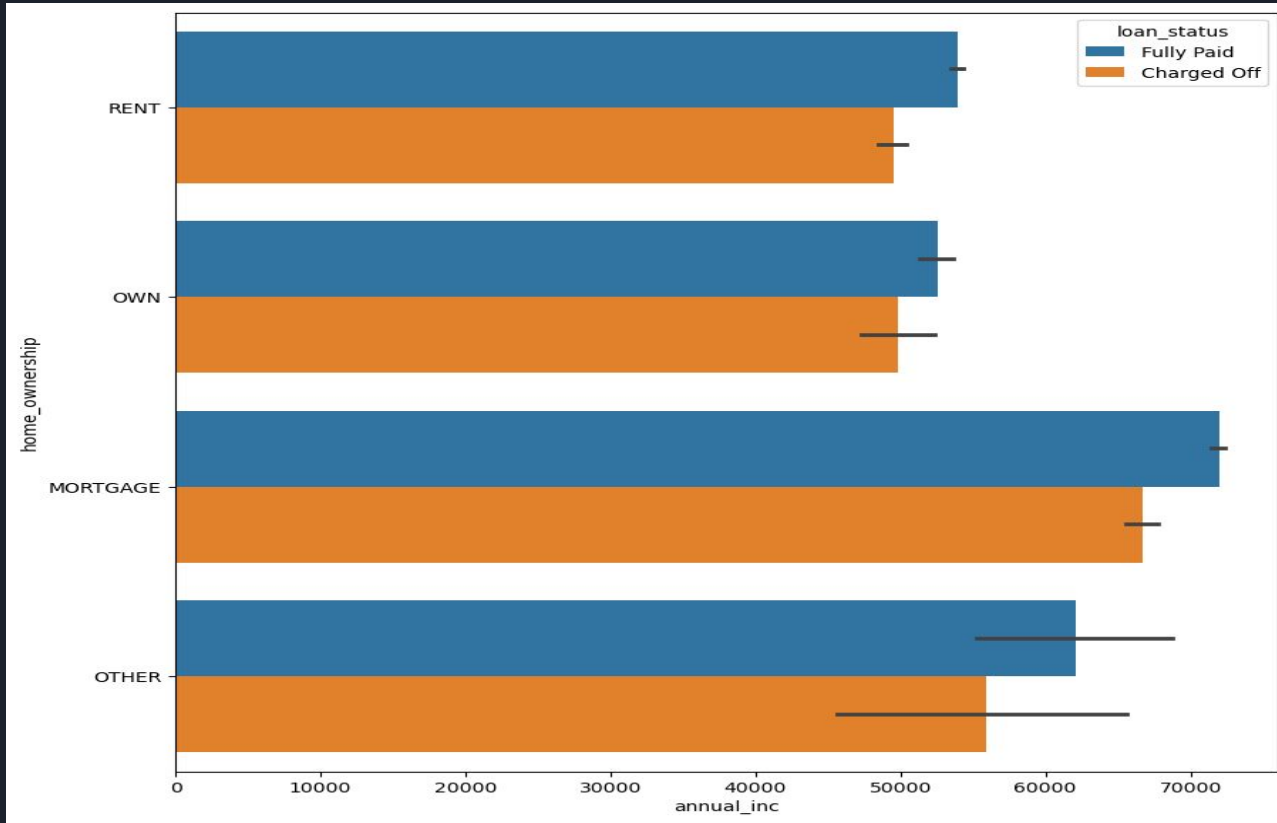


Correlation amongst different columns.

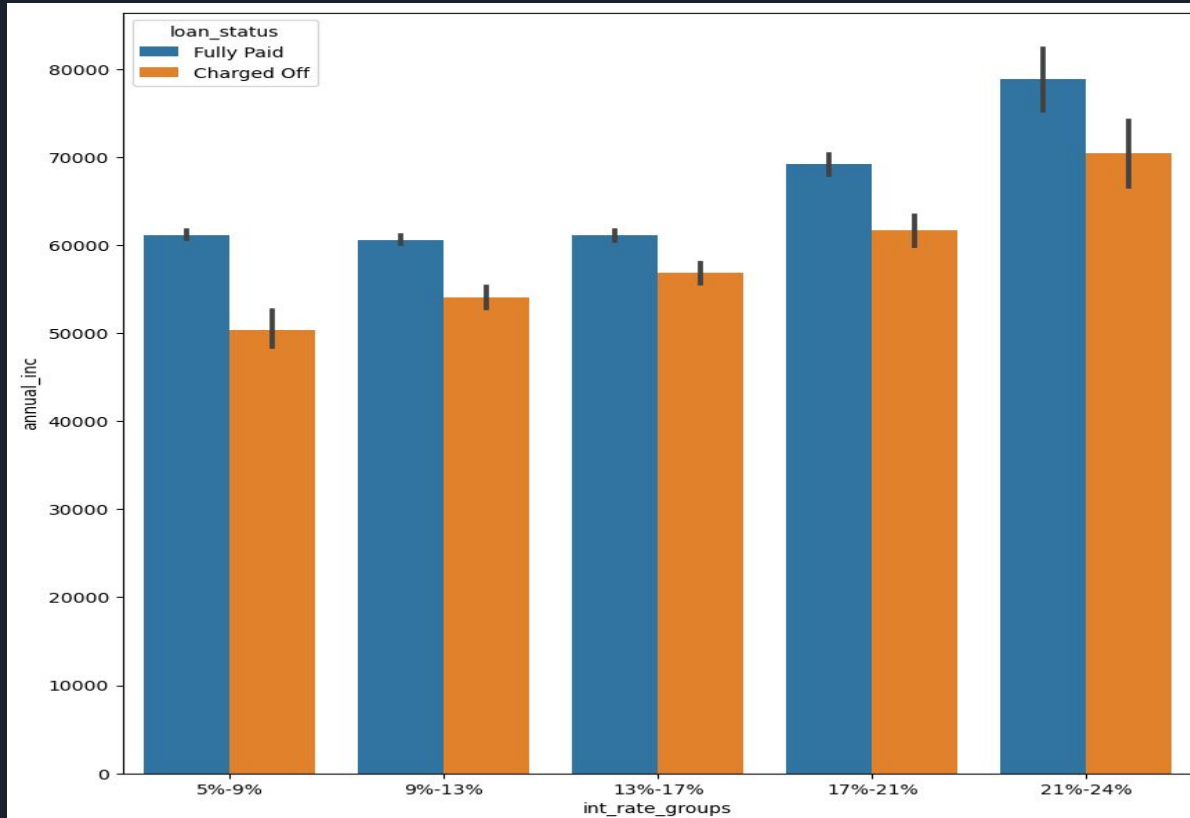
Annual income in range 60k-70k and loan purpose is 'home_improvement' are more likely to default.



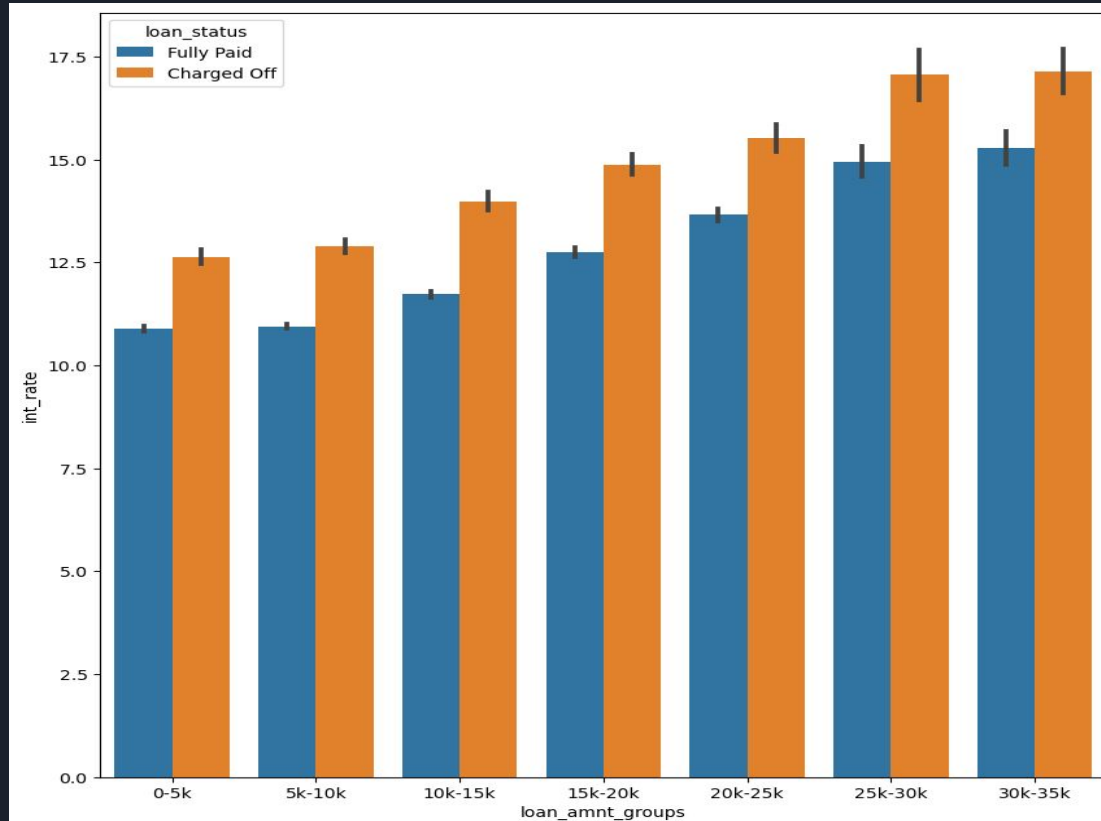
Annual income in range 60k-70k and home ownership status as 'MORTGAGE'.



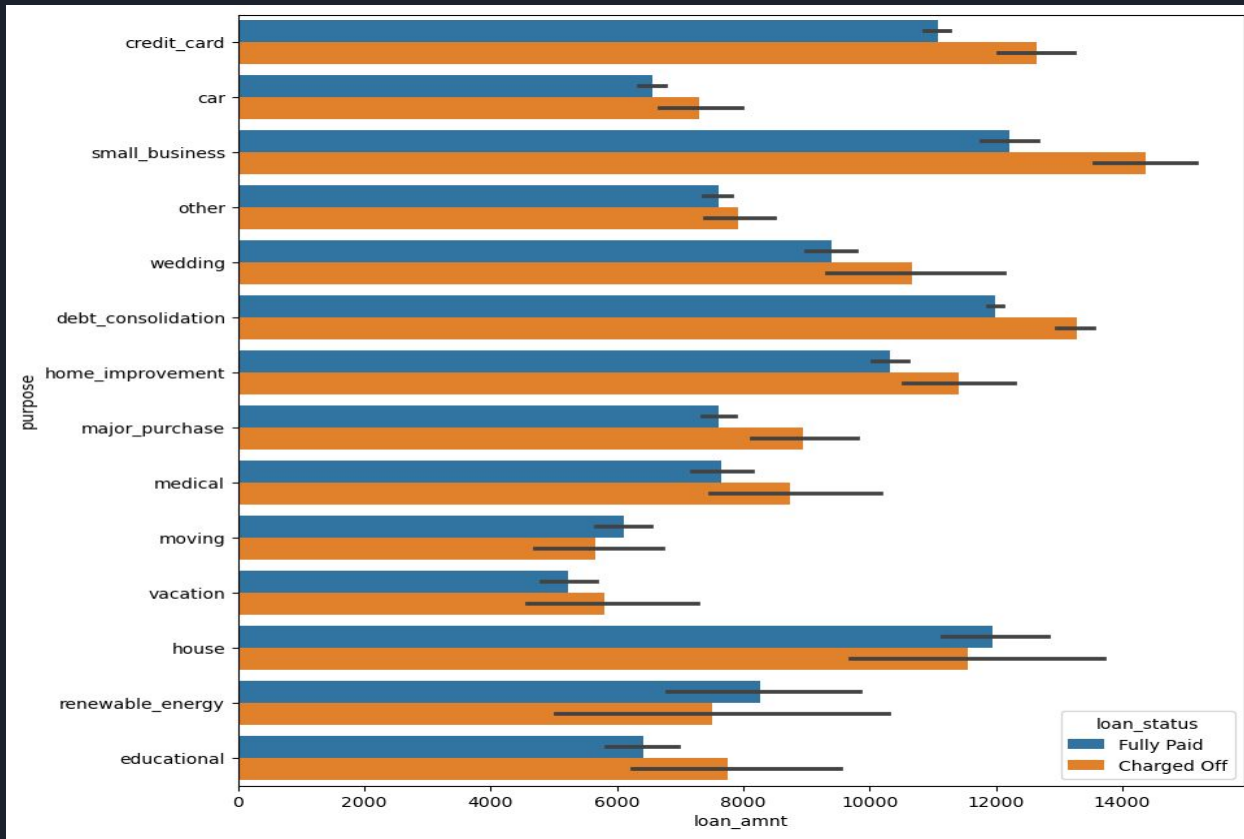
Annual income in range 60-70k and interest rate in range 21%-24% are more likely to default.



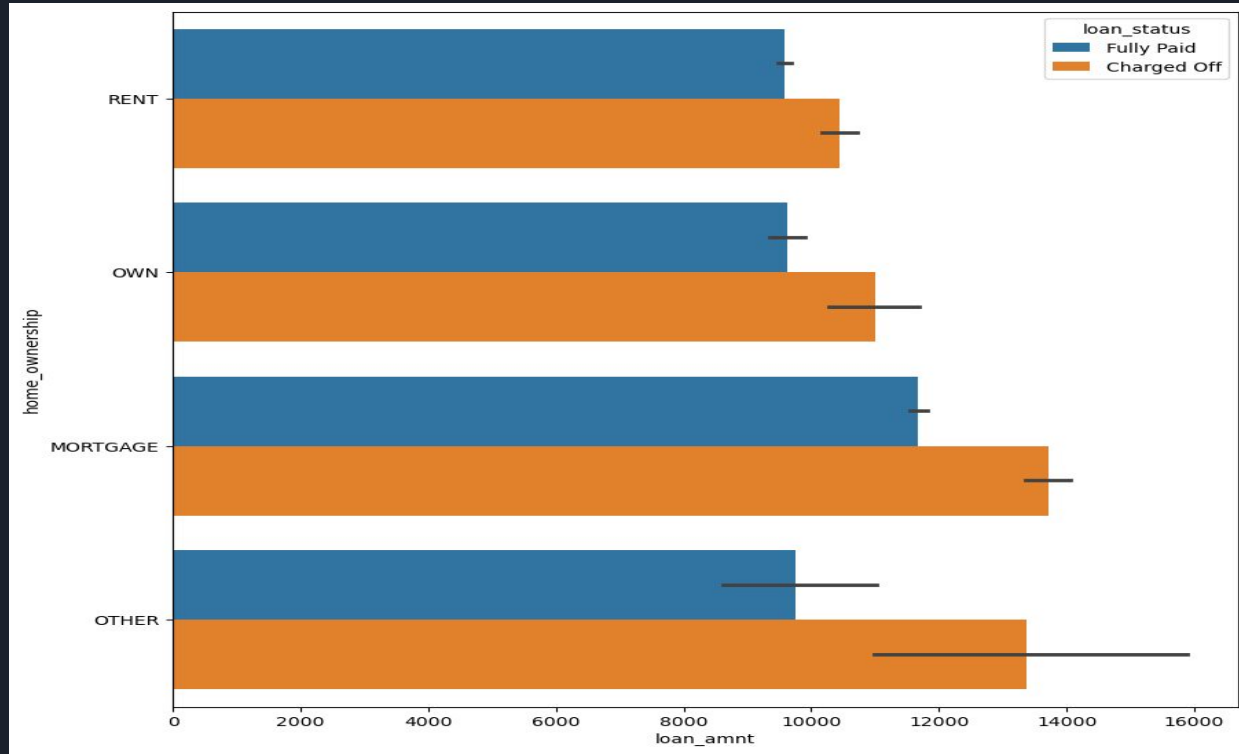
Loan Amount in range 30k-35k and int_rate in range 15-17.5% are more likely to default.




Loan amount in range 12k-14k and loan purpose is 'small_business' are more likely to default.

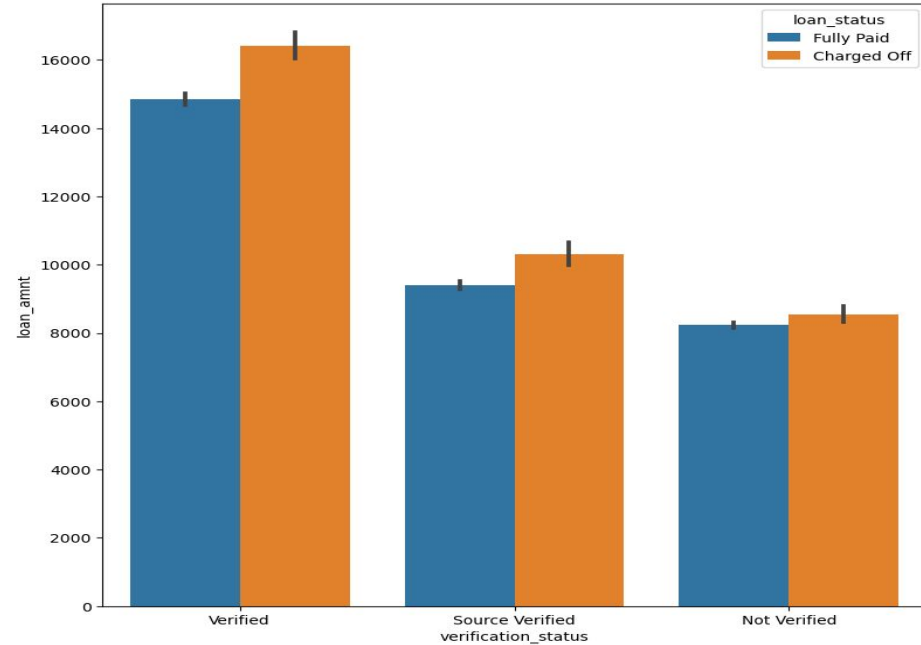
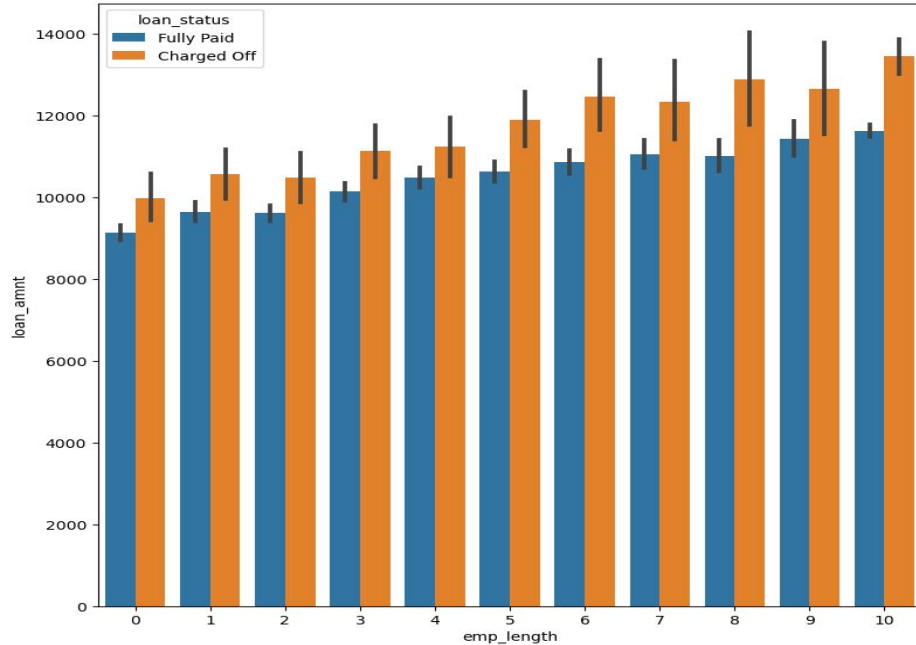


Loan amount in range 12k-14k and home ownership is either 'MORTGAGE' or 'OTHER' are more likely to default.





Loan amount is 12k-14k and emp_lenght is 10+ years and Loan amount is >16k and status as 'Verified'.





Thank You